

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/714, 333C
Source: IFW/b
Date Processed by STIC: 10/28/2005-

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 10/28/2005

PATENT APPLICATION: US/10/714,333C

TIME: 18:30:08

Input Set : D:\13499us.txt

Output Set: N:\CRF4\10282005\J714333C.raw

4 <110> APPLICANT: Dharmacon, Inc.
 5 Khvorova, Anastasia
 6 Reynolds, Angela
 7 Leake, Devin
 8 Marshall, William
 9 Scaringe, Stephen
 11 <120> TITLE OF INVENTION: Functional and Hyperfunctional siRNA
 13 <130> FILE REFERENCE: 13499US
 15 <140> CURRENT APPLICATION NUMBER: 10/714,333C
 16 <141> CURRENT FILING DATE: 2003-11-14
 18 <150> PRIOR APPLICATION NUMBER: 60/502,050
 19 <151> PRIOR FILING DATE: 2003-09-10
 21 <150> PRIOR APPLICATION NUMBER: 60/426,137
 22 <151> PRIOR FILING DATE: 2002-11-14
 24 <160> NUMBER OF SEQ ID NOS: 1591911
 26 <170> SOFTWARE: Proprietary
 28 <210> SEQ ID NO: 1
 29 <211> LENGTH: 19
 30 <212> TYPE: RNA
 31 <213> ORGANISM: Artificial Sequence
 33 <220> FEATURE:
 34 <223> OTHER INFORMATION: siRNA sense strand
 36 <220> FEATURE:
 37 <221> NAME/KEY: misc_feature
 38 <222> LOCATION: (1)...(2)
 39 <223> OTHER INFORMATION: n is any nucleotide
 41 <220> FEATURE:
 42 <221> NAME/KEY: misc_feature
 43 <222> LOCATION: (4)...(4)
 44 <223> OTHER INFORMATION: n is any nucleotide
 46 <220> FEATURE:
 47 <221> NAME/KEY: misc_feature
 48 <222> LOCATION: (6)...(9)
 49 <223> OTHER INFORMATION: n is any nucleotide
 51 <220> FEATURE:
 52 <221> NAME/KEY: misc_feature
 53 <222> LOCATION: (12)...(12)
 54 <223> OTHER INFORMATION: n is any nucleotide
 56 <220> FEATURE:
 57 <221> NAME/KEY: misc_feature
 58 <222> LOCATION: (15)...(18)
 59 <223> OTHER INFORMATION: n is any nucleotide
 61 <400> SEQUENCE: 1

CP9-6)

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Input Set : D:\13499us.txt

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W--> 62 nnanannnnu cnaannnna 19
64 <210> SEQ ID NO: 2
65 <211> LENGTH: 19
66 <212> TYPE: RNA
67 <213> ORGANISM: Artificial Sequence
69 <220> FEATURE:
70 <223> OTHER INFORMATION: sirna sense strand
72 <220> FEATURE:
74 <221> NAME/KEY: misc_feature
75 <222> LOCATION: (1)...(2)
76 <223> OTHER INFORMATION: n is any nucleotide
78 <220> FEATURE:
79 <221> NAME/KEY: misc_feature
80 <222> LOCATION: (4)...(4)
81 <223> OTHER INFORMATION: n is any nucleotide
83 <220> FEATURE:
84 <221> NAME/KEY: misc_feature
85 <222> LOCATION: (6)...(9)
86 <223> OTHER INFORMATION: n is any nucleotide
88 <220> FEATURE:
89 <221> NAME/KEY: misc_feature
90 <222> LOCATION: (12)...(12)
91 <223> OTHER INFORMATION: n is any nucleotide
93 <220> FEATURE:
94 <221> NAME/KEY: misc_feature
95 <222> LOCATION: (15)...(18)
96 <223> OTHER INFORMATION: n is any nucleotide
98 <400> SEQUENCE: 2

W--> 99 nnanannnnu gnaannnna 19
101 <210> SEQ ID NO: 3
102 <211> LENGTH: 19
103 <212> TYPE: RNA
104 <213> ORGANISM: Artificial Sequence
106 <220> FEATURE:
107 <223> OTHER INFORMATION: sirna sense strand
109 <220> FEATURE:
110 <221> NAME/KEY: misc_feature
111 <222> LOCATION: (1)...(2)
112 <223> OTHER INFORMATION: n is any nucleotide
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (4)...(4)
117 <223> OTHER INFORMATION: n is any nucleotide
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (6)...(9)
122 <223> OTHER INFORMATION: n is any nucleotide
124 <220> FEATURE:
125 <221> NAME/KEY: misc_feature

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126 <222> LOCATION: (12)...(12)
127 <223> OTHER INFORMATION: n is any nucleotide
129 <220> FEATURE:
130 <221> NAME/KEY: misc_feature
131 <222> LOCATION: (15)...(18)
132 <223> OTHER INFORMATION: n is any nucleotide
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W--> 135 nnanannnnnu unaannnnna 19
137 <210> SEQ ID NO: 4
138 <211> LENGTH: 19
139 <212> TYPE: RNA
140 <213> ORGANISM: Artificial Sequence
142 <220> FEATURE:
143 <223> OTHER INFORMATION: sirna sense strand
145 <220> FEATURE:
146 <221> NAME/KEY: misc_feature
147 <222> LOCATION: (1)...(2)
148 <223> OTHER INFORMATION: n is any nucleotide
150 <220> FEATURE:
151 <221> NAME/KEY: misc_feature
152 <222> LOCATION: (4)...(4)
153 <223> OTHER INFORMATION: n is any nucleotide
155 <220> FEATURE:
156 <221> NAME/KEY: misc_feature
157 <222> LOCATION: (6)...(9)
158 <223> OTHER INFORMATION: n is any nucleotide
160 <220> FEATURE:
161 <221> NAME/KEY: misc_feature
162 <222> LOCATION: (12)...(12)
163 <223> OTHER INFORMATION: n is any nucleotide
165 <220> FEATURE:
166 <221> NAME/KEY: misc_feature
167 <222> LOCATION: (15)...(18)
168 <223> OTHER INFORMATION: n is any nucleotide
170 <400> SEQUENCE: 4
W--> 171 nnanannnnnu cncannnnna 19
173 <210> SEQ ID NO: 5
174 <211> LENGTH: 19
175 <212> TYPE: RNA
176 <213> ORGANISM: Artificial Sequence
178 <220> FEATURE:
179 <223> OTHER INFORMATION: sirna sense strand
181 <220> FEATURE:
182 <221> NAME/KEY: misc_feature
183 <222> LOCATION: (1)...(2)
184 <223> OTHER INFORMATION: n is any nucleotide
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: (4)...(4)

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```

189 <223> OTHER INFORMATION: n is any nucleotide
191 <220> FEATURE:
192 <221> NAME/KEY: misc_feature
193 <222> LOCATION: (6)...(9)
194 <223> OTHER INFORMATION: n is any nucleotide
196 <220> FEATURE:
197 <221> NAME/KEY: misc_feature
198 <222> LOCATION: (12)...(12)
199 <223> OTHER INFORMATION: n is any nucleotide
201 <220> FEATURE:
202 <221> NAME/KEY: misc_feature
203 <222> LOCATION: (15)...(18)
204 <223> OTHER INFORMATION: n is any nucleotide
206 <400> SEQUENCE: 5
W--> 207 nnanannnnnu gncannnna 19
209 <210> SEQ ID NO: 6
210 <211> LENGTH: 19
211 <212> TYPE: RNA
212 <213> ORGANISM: Artificial Sequence
214 <220> FEATURE:
215 <223> OTHER INFORMATION: sirna sense strand
217 <220> FEATURE:
218 <221> NAME/KEY: misc_feature
219 <222> LOCATION: (1)...(2)
220 <223> OTHER INFORMATION: n is any nucleotide
222 <220> FEATURE:
223 <221> NAME/KEY: misc_feature
224 <222> LOCATION: (4)...(4)
225 <223> OTHER INFORMATION: n is any nucleotide
227 <220> FEATURE:
228 <221> NAME/KEY: misc_feature
229 <222> LOCATION: (6)...(9)
230 <223> OTHER INFORMATION: n is any nucleotide
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (12)...(12)
235 <223> OTHER INFORMATION: n is any nucleotide
237 <220> FEATURE:
238 <221> NAME/KEY: misc_feature
239 <222> LOCATION: (15)...(18)
240 <223> OTHER INFORMATION: n is any nucleotide
242 <400> SEQUENCE: 6
W--> 243 nnanannnnnu uncannnna 19
245 <210> SEQ ID NO: 7
246 <211> LENGTH: 19
247 <212> TYPE: RNA
248 <213> ORGANISM: Artificial Sequence
250 <220> FEATURE:
251 <223> OTHER INFORMATION: sirna sense strand

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TIME: 18:30:08

Input Set : D:\13499us.txt

Output Set: N:\CRF4\10282005\J714333C.raw

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253 <220> FEATURE:
254 <221> NAME/KEY: misc_feature
255 <222> LOCATION: (1)...(2)
256 <223> OTHER INFORMATION: n is any nucleotide
258 <220> FEATURE:
259 <221> NAME/KEY: misc_feature
260 <222> LOCATION: (4)...(4)
261 <223> OTHER INFORMATION: n is any nucleotide
263 <220> FEATURE:
264 <221> NAME/KEY: misc_feature
265 <222> LOCATION: (6)...(9)
266 <223> OTHER INFORMATION: n is any nucleotide
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <222> LOCATION: (12)...(12)
271 <223> OTHER INFORMATION: n is any nucleotide
273 <220> FEATURE:
274 <221> NAME/KEY: misc_feature
275 <222> LOCATION: (15)...(18)
276 <223> OTHER INFORMATION: n is any nucleotide
278 <400> SEQUENCE: 7
W--> 279 nnanannnnu cnuannna 19
281 <210> SEQ ID NO: 8
282 <211> LENGTH: 19
283 <212> TYPE: RNA
284 <213> ORGANISM: Artificial Sequence
286 <220> FEATURE:
287 <223> OTHER INFORMATION: sirna sense strand
289 <220> FEATURE:
290 <221> NAME/KEY: misc_feature
291 <222> LOCATION: (1)...(2)
292 <223> OTHER INFORMATION: n is any nucleotide
294 <220> FEATURE:
295 <221> NAME/KEY: misc_feature
296 <222> LOCATION: (4)...(4)
297 <223> OTHER INFORMATION: n is any nucleotide
299 <220> FEATURE:
300 <221> NAME/KEY: misc_feature
301 <222> LOCATION: (6)...(9)
302 <223> OTHER INFORMATION: n is any nucleotide
304 <220> FEATURE:
305 <221> NAME/KEY: misc_feature
306 <222> LOCATION: (12)...(12)
307 <223> OTHER INFORMATION: n is any nucleotide
309 <220> FEATURE:
310 <221> NAME/KEY: misc_feature
311 <222> LOCATION: (15)...(18)
312 <223> OTHER INFORMATION: n is any nucleotide
314 <400> SEQUENCE: 8

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/714,333C

DATE: 10/28/2005
TIME: 18:30:09

Input Set : D:\13499us.txt
Output Set: N:\CRF4\10282005\J714333C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:2; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:3; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:4; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:5; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:6; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:7; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:8; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:9; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:10; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:11; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:12; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:13; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:14; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:15; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:16; N Pos. 1,3,5,6,7,8,11,14,15,16,17
Seq#:17; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:18; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:19; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:20; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:21; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:22; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:23; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:24; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:25; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:26; N Pos. 1,2,4,6,7,8,9,12,15,16,17,18
Seq#:27; N Pos. 1,2,4,6,7,8,9,10,12,15,16,17,18
Seq#:28; N Pos. 4,5,7,9,10,11,12,15,18,19,20,21

VERIFICATION SUMMARY

DATE: 10/28/2005

PATENT APPLICATION: US/10/714,333C

TIME: 18:30:09

Input Set : D:\13499us.txt

Output Set: N:\CRF4\10282005\J714333C.raw

L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:135 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:207 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:243 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:387 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:459 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:495 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0
L:603 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:639 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:711 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:747 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0
L:819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0
L:855 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:891 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:927 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:963 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0
L:1035 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0